

Title (en)

A PROCESS FOR UPGRADING A CRUDE OIL PRODUCT

Title (de)

VERFAHREN ZUR VERBERRERUNG VON ROHÖL

Title (fr)

PROCÉDÉ DE VALORISATION D'HUILE BRUTE

Publication

EP 1731588 A1 20061213 (EN)

Application

EP 05105005 A 20050608

Priority

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Abstract (en)

A process for upgrading a crude oil product comprising the following steps: (a) distilling the crude oil product at atmospheric pressure to obtain at least one atmospheric distillate stream and an atmospheric residue as bottom stream; (b) optionally vacuum distilling the atmospheric residue to obtain at least one vacuum distillate stream and a vacuum residue as bottom stream; (c) supplying either the atmospheric residue or the vacuum residue to a solvent deasphalting unit and deasphalting the residue to obtain deasphalted oil and an asphaltic fraction; (d) combining at least one atmospheric distillate stream obtained in step (a) and the deasphalted oil to obtain a combined hydrocracker feedstock; and (e) supplying the combined hydrocracker feedstock to a hydrocracking unit and subjecting the feedstock to single-stage hydrocracking by contacting the combined feedstock with a hydrocracking catalyst in the presence of hydrogen at elevated pressure and temperature thereby effecting conversion of at least 25 wt% of the hydrocarbons in the feedstock boiling above 360 °C into hydrocarbons boiling below 360 °C, to obtain an upgraded crude oil product.

IPC 8 full level

C10G 67/04 (2006.01)

CPC (source: EP)

C10G 67/049 (2013.01)

Citation (search report)

- [X] US 4454023 A 19840612 - LUTZ IRVIN H [US]
- [X] GB 1557955 A 19791219 - SHELL INT RESEARCH
- [X] WO 02055192 A1 20020718 - INST FRANCAIS DU PETROLE [FR]
- [E] WO 2005085395 A1 20050915 - INST FRANCAIS DU PETROLE [FR], et al
- [A] FR 2633307 A1 19891229 - INST FRANCAIS DU PETROLE [FR]
- [DA] EP 0683218 A2 19951122 - SHELL INT RESEARCH [NL]

Cited by

WO2015097199A1; CN105849237A; KR20160102510A; CN113214866A; WO2023227639A1; WO2009003634A1; WO2018122274A1; US11130920B1; US11384298B2

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